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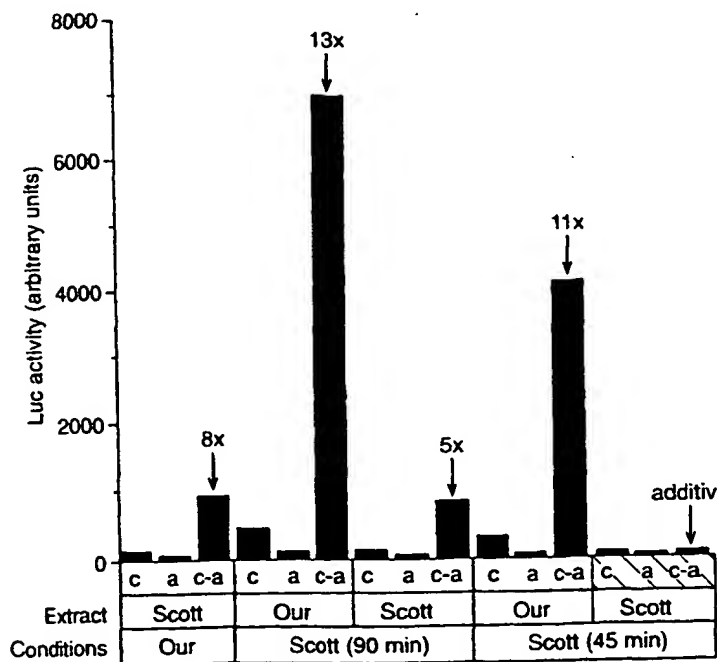
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PEAN MOLECULAR BIOLOGY LABORATORY
[DE/DE]; Postfach 10 22 09, Meyerhofstrasse 1, D-69012
Heidelberg (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GEBAUER, Fa-
tima [ES/DE]; Lerchenstrasse 28, D-69251 Gaiberg
(DE). CORONA, Davide [IT/DE]; Brechtelstrasse 8-10,
D-69126 Heidelberg (DE). BERGAMINI, Giovanna
[IT/DE]; Römerstrasse 25, D-69115 Heidelberg (DE).
BECKER, Peter [DE/DE]; Salzstrasse 9, D-82194
Gröbenzell (DE). HENTZE, Matthias [DE/DE]; Meri-
anstrasse 5, D-69117 Heidelberg (DE).(74) Agent: HALLYBONE, Huw, George; Carpmals &
Ransford, 43 Bloomsbury Square, London WC1A 2RA
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(54) Title: IN VITRO TRANSLATION SYSTEMExperiment E-872 Blow up (one set of data eliminated)
c = cap, a = poly(A), c-a = cap and poly(A)
Synergism = fold over the sum of c+a value(57) Abstract: The invention relates to a cell-free translation system using cell extracts, that reproduces the synergism that occurs during translation *in vivo* between the *cap* and the *poly(A)* tail structures of an mRNA molecule. Using this system, the amount of encoded protein produced from translation of an mRNA molecule is greater than the total of (a) the amount of the encoded protein that is produced under the same conditions when the ribonucleic acid template has a 5' cap but no 3' poly A tail, plus (b) the amount of the encoded protein that is produced under the same conditions when the ribonucleic acid template has a 3' poly A tail but no 5' cap.

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